## PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date .: 09/25/98 2:09 PM

Reported By...: Peters, Linda W.

Request,...; MA98-4

Date Submitted: 08/07/98

Submitter...: E. Chambers/C. Callicutt Request Type: inh

Date Received.: 08/07/98

Date Completed: 08/18/98

Activity : T00107

Approved By . . . : Peters Linda W .

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

	вн8м				BL8M			
Test Categories/Tests	Target	Average	StdDev	N	Target	Average	StdDev	N
Smoke							<u> </u>	
FTC Butt Length, mm		35.0				39.0		
MA Tar, mg/cigt.		30.1	0.90	19		25.2	0.91	20
MA TPM, mg/cigt.		43.4	1.79	19		34.4	1.79	20
MA Nicotine, mg/cigt.		2.07	0.079	19		1.72	0.069	20
MA Water, mg/cigt.		11.24	1.014	19		7.45	0.939	20
MA Puffs/Cigt.		13.0	0.32	19		13.6	0.41	20
Tar/Puff, mg		2.3				1.9		
MA pH in Whole Smoke (PxP)		5.0				5.2		
MA CO, mg/cigt.		27.1	1.29	20		27.1		20
TX pH in Whole Smoke		5.1	0.04	2		5.1	0.04	2
Filter								
Tipping Paper Length, mm		32.2	0.26			35.8	0.25	20
Ventilation, %		13	2.8	100		29	4.0	100
Filler		2 266		_				
Tobacco Weight, g		0.866	0.0028	2		0.823	0.0085	2
<pre>(1)Total Alkaloids, mg/cigt. (1)OV After Grinding, %</pre>		14.92	0.099	2		14.34	0.290	2
(1)0V After Girnding, &		11.7	0.02	2		12.0	0.01	2
	BU8B				ME8			
Test Categories/Tests	BU8B Target	Average	StdDev	<u>N</u>		Average	StdDev	N_
Smoke			StdDev	<u>N</u>		Average	StdDev	_N_
Smoke FTC Butt Length, mm		39.0				39.0	StdDev	N
Smoke FTC Butt Length, mm MA Tar, mg/cigt.		39.0 18.3	0.90	20		39.0 23.8	1.03	_ <u>N</u>
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt.		39.0 18.3 23.7	0.90	20 20		39.0 23.8 32.2	1.03	20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt.		39.0 18.3 23.7 1.37	0.90 1.23 0.065	20 20 20		39.0 23.8 32.2 1.67	1.03 1.61 0.061	20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt.		39.0 18.3 23.7 1.37 4.03	0.90 1.23 0.065 0.498	20 20 20 20		39.0 23.8 32.2 1.67 6.76	1.03 1.61 0.061 0.860	20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt.		39.0 18.3 23.7 1.37 4.03 13.2	0.90 1.23 0.065	20 20 20		39.0 23.8 32.2 1.67 6.76 13.6	1.03 1.61 0.061	20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg		39.0 18.3 23.7 1.37 4.03 13.2	0.90 1.23 0.065 0.498	20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6	1.03 1.61 0.061 0.860	20 20 20 20
Smoke  FTC Butt Length, mm  MA Tar, mg/cigt.  MA TPM, mg/cigt.  MA Nicotine, mg/cigt.  MA Water, mg/cigt.  MA Puffs/Cigt.  Tar/Puff, mg  MA PH in Whole Smoke (PxP)		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2	0.90 1.23 0.065 0.498 0.44	20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7	1.03 1.61 0.061 0.860 0.43	20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt.		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6	0.90 1.23 0.065 0.498 0.44	20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8	1.03 1.61 0.061 0.860 0.43	20 20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA PH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2	0.90 1.23 0.065 0.498 0.44	20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7	1.03 1.61 0.061 0.860 0.43	20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1	0.90 1.23 0.065 0.498 0.44	20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0	1.03 1.61 0.061 0.860 0.43	20 20 20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1	0.90 1.23 0.065 0.498 0.44 0.75 0.02	20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0	1.03 1.61 0.061 0.860 0.43 0.82 0.04	20 20 20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, %		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1	0.90 1.23 0.065 0.498 0.44 0.75 0.02	20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0	1.03 1.61 0.061 0.860 0.43	20 20 20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA PH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1	0.90 1.23 0.065 0.498 0.44 0.75 0.02	20 20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0 36.0 34	1.03 1.61 0.061 0.860 0.43 0.82 0.04	20 20 20 20 20 20 20 20
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler Tobacco Weight, g		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1 36.1 54	0.90 1.23 0.065 0.498 0.44 0.75 0.02 0.16 8.5	20 20 20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0 36.0 34	1.03 1.61 0.061 0.860 0.43 0.82 0.04 0.06 4.6	20 20 20 20 20 20 20 20 3
Smoke FTC Butt Length, mm MA Tar, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. Tar/Puff, mg MA PH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler		39.0 18.3 23.7 1.37 4.03 13.2 1.4 5.2 20.6 5.1	0.90 1.23 0.065 0.498 0.44 0.75 0.02	20 20 20 20 20 20 20 20		39.0 23.8 32.2 1.67 6.76 13.6 1.7 5.2 26.8 5.0 36.0 34	1.03 1.61 0.061 0.860 0.43 0.82 0.04	20 20 20 20 20 20 20 20

All tests were conducted in the Philip Morris U.S.A., Product Testing Laboratory with the exception of those tests denoted by a (1). These tests were performed by Philip Morris U.S.A. Analytical Methods and Applications Division. The test results relate to the samples submitted to the Product Testing Laboratory during the stated time period. Extrapolation outside this time period is not appropriate.

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## PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date .: 09/25/98 2:09 PM

Reported By...: Peters, Linda W.

Request....: MA98-4 Submitter...: E. Chambers/C. Callicutt

Date Submitted: 08/07/98

Date Received .: 08/07/98

Request Type: inh : T00107 Activity

Date Completed: 08/18/98

Approved By . . .: Peters, Linda W.

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

Test Categories/Tests	MU8	7	25 3D	**	VA8	- · <u>-</u>	<del></del>	
Smoke	Tarqet	Average	StdDev	<u>N</u>	<u> Tarqet</u>	<u>Average</u>	StdDev	<u>N</u>
FTC Butt Length, mm		39.0				25 0		
MA Tar, mg/cigt.		17.0	0.82	19		35.0	0.07	20
MA TPM, mg/cigt.		21.8	1.27	19		31.3 46.7		20 20
MA Nicotine, mg/cigt.		1.37	0.047			2.20		20
MA Water, mg/cigt.		3.41	0.546	19		13.11	1.214	20
MA Puffs/Cigt.		12.6	0.39			12.4	0.41	20
Tar/Puff, mg		1.4	0.39	19		2.5		20
MA pH in Whole Smoke (PxP)		5.2				5.2		
MA CO, mg/cigt.		21.5	1.20	20		26.5	1.18	20
TX pH in Whole Smoke		5.0	0.02	20		5.1		20
Filter		3.0	0.02	2		J. 1	0.02	2
Tipping Paper Length, mm		36.1	0.11	20		32.2	0.41	20
Ventilation, %		49		100		23	2.4	
Filler			•			23	2.3	100
Tobacco Weight, g		0.746	0.0035	2		0.728	0.0014	2
(1)Total Alkaloids, mg/cigt.		13.98	0.085			12.48	0.057	$\tilde{2}$
(1)OV After Grinding, %		11.0	0.01	2		11.7	0.02	2
	VG8B	· · · · · · · · · · · · · · · · · · ·			MR6MB			
Test Categories/Tests	<u>Target</u>	Average	<u>StdDev</u>	N	<u>Tarqet</u>	Average	StdDev	N
Smoke								
FTC Butt Length, mm		39.0	_			28.0		
MA Tar, mg/cigt.		20.6	0.70	18		28.9	1.01	20
MA TPM, mg/cigt.		28.2	1.14	18		46.0	1.98	20
MA Nicotine, mg/cigt.		1.54	0.057	18		1.86	0.070	20
MA Water, mg/cigt.		6.06	0.806	18		15.22	1,164	20
								20
MA Puffs/Cigt.		12.3	0.40	18		10.6	0.34	
Tar/Puff, mg		1.7	0.40	10		2.7	0.34	
Tar/Puff, mg MA pH in Whole Smoke (PxP)		1.7 5.2				2.7		
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt.		1.7 5.2 21.8	0.57	18		2.7 25.5	0.99	20
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke		1.7 5.2				2.7		20 2
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter		1.7 5.2 21.8 5.0	0.57 0.06	18 2		2.7 25.5 5.0	0.99	2
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm		1.7 5.2 21.8 5.0	0.57 0.06 0.43	18 2 20		2.7 25.5 5.0 25.1	0.99 0.02 0.15	2 20
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, %		1.7 5.2 21.8 5.0	0.57 0.06 0.43	18 2		2.7 25.5 5.0	0.99	2
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler		1.7 5.2 21.8 5.0 36.1 41	0.57 0.06 0.43 2.8	18 2 20 100		2.7 25.5 5.0 25.1 3	0.99 0.02 0.15 0.8	2 20 97
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler Tobacco Weight, g		1.7 5.2 21.8 5.0 36.1 41	0.57 0.06 0.43 2.8	18 2 20 100		2.7 25.5 5.0 25.1 3	0.99 0.02 0.15 0.8	2 20 97 2
Tar/Puff, mg MA pH in Whole Smoke (PxP) MA CO, mg/cigt. TX pH in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Filler		1.7 5.2 21.8 5.0 36.1 41	0.57 0.06 0.43 2.8	18 2 20 100		2.7 25.5 5.0 25.1 3	0.99 0.02 0.15 0.8	2 20 97

## Notations:

вням - ван 100 м

BL8M - B&H LIGHTS 100 M

All tests were conducted in the Philip Morris U.S.A., Product Testing Laboratory with the exception of those tests denoted by a (1). These tests were performed by Philip Morris U.S.A. Analytical Methods and Applications Division. The test results relate to the samples submitted to the Product Testing Laboratory during the stated time period. Extrapolation outside this time period is not appropriate.

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## PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date .: 09/25/98 2:09 PM

Request....: MA98-4

Submitter...: E. Chambers/C. Callicutt

Request Type: inh

Activity : T00107 Reported By...: Peters, Linda W.

Date Submitted: 08/07/98 Date Received : 08/07/98

Date Completed: 08/18/98

Approved By . . . : Peters, Linda W.

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

BU8B - B&H DELUXE ULTRA LIGHTS 100 B

ME8 - MERIT 100

MU8 - MERIT ULTRA LIGHTS 100

VA8 - VIRGINIA SLIMS 100

VG8B - VIRGINIA SLIMS LIGHTS 100 B

MR6MB - MARLBORO KSF M R

All Virginia Slim samples (VA8 and VG8B) were taped with 11.7mm tape.

ME8 - Computer error while committing data. E-ctbwt was analyzed twice.

VA8 - Samples VA8 and VG8B (Virginia Slims) have 23mm circumference and

were half-taped using 12.7 tape. Samples will be resmoked.

VG8B - Samples VA8 and VG8B (Virginia Slims) have 23mm circumference and were half-taped using 12.7 tape. Samples will be resmoked.

VG8B - Run 3 port 4 set to missing smoking lab used the bad ports program to omit tpm/puff count results in weigh back were negative. Port not recevied for nicah2o analyses.

cc:

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